



UNIVERSITY OF
ARKANSAS

Request for Qualifications – General Contractors

NANOSCALE MATERIAL SCIENCE AND ENGINEERING BUILDING CLEAN ROOM FIT OUT

The University of Arkansas Fayetteville, in accordance with the policies of the Board of Trustees, is soliciting responses from qualified firms to provide general contractor construction management services for the *Nanoscale Material Science and Engineering Building clean room fit out*.

PROJECT DESCRIPTION

The Nanoscale Material Science and Engineering Building was built in 2011 to house research laboratories, faculty offices, and interdisciplinary graduate education spaces for the university's Institute for Nanoscience and Engineering¹. The building's design allows for atomic-level research with sensitive instruments that require vibration isolation, electromagnetic wave isolation, and precise temperature control. At the time of its construction, the university decided that building additional unfinished shell space would be a prudent use of the central campus's limited land resources. This meant that the proposed second-floor clean room and the entire third floor of the building—which will include the clean room's mechanical space—would be empty until funds were available for fit out. Since 2011, a series of small projects have incrementally created new research and education spaces on the third floor. The large clean room, which is critical to best-in-class nanoscience research programs, remains empty.

This project will fit out the clean room and its associated support spaces. The clean room will allow research that may, for example, include fabrication and characterization of nanomaterials or silicon germanium tin semiconductor sensors or silicon carbide semiconductor devices. A recently-funded grant from the National Science Foundation that will make use of the clean room is focused on quantum effects in semiconductors that may be computationally useful. Other possible work in the space might include examination of mineral specimens to accurately determine the low concentrations of different metal isotopes to date samples.

The selected design team will lead an in-depth programming exercise in consultation with faculty and administration to determine how to create a space that will maximize its impact on current and future research projects, including factors such as the appropriate standard for particulates, the handling of potential chemical hazards associated with semiconductor fabrication, and identification of the tools to be housed in the facility. All necessary supporting mechanical systems and spaces, changing and locker rooms, storage, etc. will be part of the project. The shell space for the second-floor clean room and the third-floor mechanical space each contain around 3600sf. It is expected that the programming effort will help balance user expectations with available budget so that the subsequent design and documentation process can proceed in a straightforward manner.

¹ See the institute's website at <https://nano.uark.edu>

The outfitting of this clean room laboratory will take place at the same time as the construction of the adjacent Institute for Integrative and Innovative Research, a new 135,000sf research building, and will complement the developing research district in the central campus. A key question for both the architect and construction manager will be how this lab space can be assembled while the adjacent building is under construction, which creates a limited footprint for laydown and site access. Furthermore, much of the ongoing research work in the Nanoscale Material Science and Engineering Building is vibration sensitive and not tolerant of power interruption, so coordination of clean room outfitting with building users will be critical.

The total project cost is currently estimated at \$10 million. General contractors and design consultants will work with a university building committee, an independent third-party commissioning agent, and Facilities Management to advance campus master planning and design principles, as well as sustainability requirements (LEED Silver is baseline). For general campus planning and standards information, visit <http://planning.uark.edu>.

ANTICIPATED PROJECT SCHEDULE

<i>Request for Qualifications (RFQ) issued</i>	<i>June 25</i>
<i>Statement of Qualification (SOQ) due</i>	<i>July 13</i>
<i>interviews of shortlisted firms</i>	<i>August 2</i>
<i>Board of Trustees selection announced</i>	<i>September 17</i>
<i>contract negotiations</i>	<i>September 2021</i>
<i>design starts</i>	<i>October 2021</i>
<i>construction starts</i>	<i>November 2022</i>
<i>project complete</i>	<i>December 2023</i>

SUBMISSION

The deadline for responses is 1:00pm local time on Tuesday, July 13, 2021.

All respondents will be notified of the results by EMAIL, so please provide accurate contact information.

Address ten (10) copies of responses to: James Milner, Construction Coordinator
University of Arkansas
Facilities Management Planning and Design
521 S. Razorback Road, FAMA C-100
Fayetteville, AR 72701

Statements of Qualification will be reviewed by a selection committee using a standardized *Construction Services Shortlist Evaluation* form. This form is available for download at <http://planning.uark.edu/rfq>.

Format requirements:

Printed responses should be no larger than 8.5in x 11in, limited to **50 sheets maximum (100 pages)**, fully recyclable (i.e. no plastic covers, plastic tabs, etc.) and bound with glue, staples, or thread (i.e. perfect bound, saddle stitching, etc.). No metal or plastic coils allowed. **Responses that do not meet these requirements will be disqualified.**

Please send a digital copy of the response via email to jmilner@uark.edu in addition to the printed booklets.

Content requirements:

Include the information below and organize it in an easily accessible manner. You do not need to divide the response into chapters exactly matching the descriptions below. **Responses that do not include the required licensure information will be disqualified.**

1. Proof of licensure in the State of Arkansas
2. Experience of key personnel in Guaranteed Maximum Price (GMP) and fast-track projects
3. Records of management teams on similar projects with timely completion, and with high quality workmanship
4. Current maximum bonding capacity and rate
5. Current and projected workload
6. **Specific project experience** (within the past five years) with university research laboratories and their programmatic, spatial, and technological requirements
7. **Specific project experience** (within the past five years) with clean rooms housing diverse research techniques and procedures including—but not limited to—nanomaterials.
8. **Specific project experience** (within the past five years) with fitting out laboratories of similar complexity in functioning research buildings while minimizing disruption to ongoing research
9. Prior experience constructing projects under nationally-recognized sustainable rating systems
10. Prior experience with fully-commissioned projects
11. Owner verification and contact information for previous similar projects
12. Statement of diversity in the workforce, if applicable
13. Certificate of women-owned or minority-owned business, if applicable

PROFESSIONAL SERVICES REQUIRED

GUARANTEED MAXIMUM PRICE/FAST-TRACK MANAGEMENT, ESTIMATING, SUBCONTRACTOR SELECTION, PROJECT AND CHANGE ORDER PRICING, DEMOLITION, SCHEDULE CONTROL, COST REDUCTION AND CONTROL, PROJECT COORDINATION, BUILDING INFORMATION MODELING (BIM), CLOSEOUT, AND WARRANTY.

LOCATION

The building is situated on Evergreen Hill, across from Old Main Lawn, fronting onto Dickson Street.

